

Claremont Colleges

Scholarship @ Claremont

Pomona Senior Theses

Pomona Student Scholarship

2023

The Man in the Fiber Optic Cable: A Short Film

Lucas Cunningham

Follow this and additional works at: https://scholarship.claremont.edu/pomona_theses



Part of the [Film Production Commons](#), [Other Film and Media Studies Commons](#), and the [Screenwriting Commons](#)

Recommended Citation

Cunningham, Lucas, "The Man in the Fiber Optic Cable: A Short Film" (2023). *Pomona Senior Theses*. 276. https://scholarship.claremont.edu/pomona_theses/276

This Open Access Senior Thesis is brought to you for free and open access by the Pomona Student Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in Pomona Senior Theses by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@cuc.claremont.edu.

THE MAN IN THE FIBER OPTIC CABLE:
TECHNOLOGY, LABOR, AND THE HUMAN BODY
A SHORT FILM

by

LUCAS M. B. CUNNINGHAM

SUBMITTED TO POMONA COLLEGE IN PARTIAL
FULFILLMENT OF THE DEGREE OF BACHELOR OF ARTS

PROFESSOR TRAN

12 DECEMBER 2022

For my senior exercise, I created a narrative short film called “The Man in the Fiber Optic Cable.” The film asks the question, what happens when the tech industry’s need for constant growth comes up against the physical limitations of the human bodies that support it? The answer is a lot of hardship, but ultimately, a kind of peace.

My film, which runs just under 14 minutes in length, follows a young man named Gary. Gary lives inside of a fiber optic cable operated by a company called FiberSprint, where he spends his days cold-calling potential customers selling cable subscriptions, in order to make enough money to pay for his ailing father’s cancer treatment. What make FiberSprint unique is their “personal guarantee” that their connection speeds are faster than all the competitors. At the end of each workday, Gary is given a time, and he must go out into the cable and physically run the length of the cable in under the time given to him, or he’ll be fired. When he's not working, he’s constantly training, but struggles to get better in the face of mediocre training equipment, low quality food, and endless isolation. Eventually, a new technological breakthrough results in an impossibly faster time, and while Gary tries his hardest to hit it, he inevitably fails. He’s fired, leaves the cable, and goes home to spend time with his father, savoring the present moment rather than training for the next.

On an emotional level, this film is about the strength of human resolve, sacrifice, and what it means to push your body to its absolute limits. And while I hate to over-explain the themes of a piece of art that I believe should speak for itself, it’s about finding peace in the knowledge that we as humans are fundamentally limited.

On a theoretical level, the same is true. The tech industry is one built on the assumption, if not the *assurance*, of continuous, limitless, and exponential growth. This assumption is true of many capitalist structures, but it’s particular prevalent in tech, an industry associated more than

any other with “progress” and “the future.” But while the idea of endless growth is alluring, it’s also, simply put, physically impossible. At any scale, we eventually run into the physical constraints of our universe, whether it’s resource scarcity, quantum instability, or the fragility of the human form. Moore’s Law exemplifies this. Theorized by Intel cofounder Gordon E. Moore in 1965, the law states that, “the number of transistors on a microchip roughly doubles every two years, whereas its cost is halved in the same timeframe” (Tardi). In other words, microchips are getting smaller, cheaper, and more powerful on an exponential scale. To Moore’s credit, this law has held true for nearly 60 years, but we’re now reaching a point where it takes more energy to cool the chips than is actually passed between them. Growth has stagnated in the face of a physical constraint. Yet Intel continues to try to make ever smaller chips, despite their own predictions of failure (Tardi). My film is based around this concept, and to investigate it, I will synthesize media theory on self-tracking, data feminism and embodiment, Marx’s theory of alienation, McLuhan’s technological determinism, the history of labor and technology, and more. I will also draw from the science fiction tradition, both the speculative, high-concept Sci-Fi of the 1960s and 70s, and more modern works dealing with the tech industry as it exists today.

In *Metamorphoses of Science Fiction*, arguably the foundational text of science fiction critical theory, Darko Suvin defines science fiction as, “a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author’s empirical involvement” (7). In other words, science fiction creates a world that is removed from ours, but in such a way that that removal can be explained through rationalization. While subsequent authors have complicated this definition in valuable ways, it remains the type of world I aim to create: a situation in which Gary is cut off from the outside world, and in which that world itself

is different from our own, but in such a way that it's explainable what he's doing there (which, if you watch the film, I believe it is). More important than the formal definition, however, is what science fiction allows us to *do*. It allows us to look forward, to envision futures different from our own, and to make sense of how we behave in them, so as to better understand how to relate to our present reality. "The crablike nostalgia of going backwards is unavailable...there is simply no choice but to go onward, even if that means progressing into a more and more commodified postmodernity" (Freedman 199). As Freedman elaborates, science fiction strives necessarily past commodity into utopia, creating, as it were, "ways out" of our current trajectory. Science fiction picks out an (oftentimes bleak) aspect of our reality (such as human labor in tech) and pushes it to the extreme (Gary sprinting down a cable every day), showing us the full scope of the consequences (Gary's depressing life), but also the salvation (Gary returning home to make peace with his father, remembering what's really important). Science fiction provides the perfect imaginative, speculative framework to grapple with the tech industry and what its ramifications are for our future.

My film is also concerned with the physicality of technology, and in particular the human labor behind it. The tech industry is often marketed as "clean," futuristic and sterile. But throughout the history of technological development, almost every piece of technology has been created through people, often marginalized people, doing difficult hands-on work. In the 1960s, a small group of women was responsible for "weaving" by hand the CPU cores for the Apollo missions, crucial components to the success of the moon missions, but they were often disparaged as the "little old ladies" of NASA (Rosner). At the same time, Fairchild Semiconductor opened a plant on Navajo land from 1965 through the late 1970s which employed mostly Navajo women (Nakamura 923). These women were largely underpaid, and the company

argued that the women were not only well-suited to the work on account of their race and gender, but that building microchips was a form of cultural expression for them no different from traditional Navajo weaving practices (929). This was blatantly false, and the Navajo people saw very little economic benefit from the plant, as most of the profit went back to Fairchild. Today, similar situations occur, whether in the form of behind-the-scenes content moderators who must sift through flagged images and videos of pornography, violence, hate, and other explicit content in order to keep websites like Instagram and Facebook operating smoothly (Roberts 36), or children working in dark, cramped shafts to mine cobalt for Lithium-Ion batteries in the Democratic Republic of the Congo (Baumann-Pauly). Dirty, isolating, physical and mental labor is the foundation of all technology, and more often than not that labor is done by poor people, women, and people of color. As Nakamura puts it, “some must labor invisibly for others of us to feel, if not actually *be*, free and empowered through technology use: technoscience is, indeed, an integrated circuit, one that both separates and connects laborers and users” (919). My film is directly concerned with this “invisible labor,” as Gary works alone in a basement, isolated from everyone except for his endless one-sided conversations with customers, in which he is both separated from and connected to his “users.” One shortcoming of my film is that it doesn’t integrate critiques of tech labor along racial or gender lines (with the exception of the recorded voice, which I will touch on later). This is largely due to the cast available to me and my desire to write from a perspective closest to my own, but I also demonstrate the universality of the toll the tech industry, and capitalism writ large, takes on everyone. Gary is there in the first place because he can’t afford healthcare for his ailing father, despite his father having some degree of financial stability. In other words, the system doesn’t account for the physical realities of human

existence, or rather, completely ignores them, forcing them to labor invisibly for the illusion of progress and freedom.

In addition to the isolation from others that the tech industry creates, I want to explore the ways in which technology isolates us from ourselves. There are multiple useful theoretical frameworks here, most notably Marxism and feminism, in particular “data feminism.” Marx writes that, “The worker puts his life into the object; but now his life no longer belongs to him but to the object. Hence, the greater this activity, the more the worker lacks objects. Whatever the product of his labor is, he is not. Therefore, the greater this product, the less is he himself” (Marx 108). Under capitalism, the worker no longer sees the product of their work, only a proxy of it, and in the tech industry, the products are even more ethereal. Indeed, while Gary becomes faster and faster every day, he doesn’t feel a sense of accomplishment, because his success has accomplished nothing: the next day, he’ll just have to do it again, faster. He doesn’t benefit from the connection speeds of the cable; he only exists to run it.

This concept also connects to a more modern concept, the idea of self-tracking. Fitness tracking apps like Strava and MyFitnessPal have become increasingly popular, and devices like Fitbit are commonplace. We are in a position as consumers, athletes, and people, to receive more data about our bodies and our personal performance than we ever have in history. This is a very exciting concept, but also a dangerous one, because we don’t have sole control over that data. Companies like Fitbit exist to package our data and sell it back to us, in the form of normative guidance that ostensibly makes us stronger, healthier people. But the reality is this guidance can be quite damaging, whether it’s the completely fabricated notion of 10,000 steps a day being the ideal distance (Nafus & Neff 39), or the tendency of many fitness trackers to continuously increase your daily step goals as you surpass them. Again, we see the capitalist idea of

continuous growth applied to the human body. Inevitably, the growth will be impossible, but tech companies present these shortcomings as failures of will, not physical limitations. This is the kind of thinking Gary must contend with, ultimately coming to the realization, once “freed” from this mindset, that constant improvement is impossible, and that fulfillment comes not from striving for improvement but from being present.

Here, we can bring another theoretical framework to bear: the idea of “data feminism” and embodiment. As we as consumers increasingly are also seen by tech companies as producers of data to analyze and sell, we too become alienated from the products of our own existence, our data. In *Data Feminism*, Catherine D’Ignazio and Lauren F. Klein contend that data is often used to “maintain an unequal status quo” (17) and posit a solution: embodiment. They argue we should embrace the feelings that accompany data, that other forms of knowledge are equally valid, and that above all, we exist as “living, feeling bodies in the world.” While their argument is based more around data science, the same argument can be extended to self-tracking. Having access to the data about our physical activities, even having it fed back to us through a normative or growth-oriented lens, does not and should not negate the fact that the data still comes from our own bodies. As a result, we should *feel* our physical process and our results, make them our own, not just read them and strive to do better. This is what Gary must accept by the end of my film, as he becomes severed from his growth-oriented data, constantly fed back to him, and instead goes for a run for no purpose other than to feel alive, to push his body, to watch a sunset. In my film, this is what embodiment looks like. I also comment on dis-embodiment, and the often-silenced role of women in technology, through the use of the automated female phone system. All the employees Gary interacts with are male, yet the phone remains a disembodied female, a common theme in digital media from Siri to Ava in *Ex Machina* to Cortana in *Halo*. The tech

space excludes women, but still relies on their silent, disembodied, often uncredited labor, and I hope to draw parallels in my film between Gary and this disembodied voice as well.

As I touched on briefly above, there are many other works in the sci-fi/speculative fiction genre that influenced my work. In particular, I'm inspired by high-concept science fiction of the 1960s, a period in which technology was both hopeful and threatening, as well as one in which many of the insidious practice of the tech industry began to manifest fully. My film is in some ways a very abstract piece, and I'm particularly drawn to the way Kurt Vonnegut creates speculative spaces that are bounded less by explanation and more by imagination, as in *Slaughterhouse Five* (1998) and *Breakfast of Champions* (1975). If Suvin defines science fiction as the literature of cognitive estrangement, Vonnegut's characters are certainly estranged, but their situations are often explained only to the point that it's necessary to understand the story. Anything more than that is beside the point. This was a viewpoint I found myself echoing during the production process. After I told them about the idea, many people would ask me: is he a tiny man, or is the cable really big? It's a valid question, and I usually told them it's a big cable. But to me, it's beside the point, and it wasn't a question I felt like I needed to answer explicitly in my film.

In addition, I drew many of my visual and thematic reference points from two contemporary shows, *Black Mirror* (2016) and *Severance* (2021). My film aims to be a combination of the two, integrating the abstract, conceptual sci-fi of Vonnegut with the techno-corporate, stark, yet aesthetically interesting world of modern speculative fiction. In this way, I hope to create a unique stylistic tone that is grounded yet hopeful, allowing us to grapple with large issues in a space that leaves room for humor, heart, and imagination. And, of course, I drew heavily on my own experiences as a competitive track and cross-country athlete, especially my

(many) experiences with injuries and the toll that training alone and working extra hard just to reach a baseline take on the body and mind.

I first had the idea for this film while taking Carlin Wing's digital media studies course, and I was fascinated with the idea of how to turn it into a cohesive piece of work, both practically and conceptually. I first wrote it as a short story, then as a film script, then didn't touch it for almost a year. When I decided to make it my thesis project, I was daunted by the technical hurdles ahead, but excited to face them. And making this project was challenging, to say the least, but also really rewarding. We shot it over six days in five separate locations: an apartment at Claremont Colleges Apartments, an aqueduct, a park, a professor's house, and the Claremont School of Theology. This ended up being more than thirty hours on set for me, although a significant portion of that was set-up and take-down. Not to mention the hours put into pre-production: costuming, acquiring, and moving and charging gear, sourcing props, scheduling, and more. Overall, I'm really happy with how the process went. I've had a decent bit of experience producing my own short films in the past, but for this one, I wanted to go to the next level in terms of production quality. By and large, I feel like I succeeded. In the past, I've worked as essentially a one-man, run-and-gun crew, with an occasional PA. For most of the shoots, I had a DP (Evan Johnson), a producer/gaffer (Ellie Griffin), a sound recordist (Jack Rosencrans), and a boom op (JT Bard), give or take a couple of people (Nathaniel Getachew, Paris Maisel). This was definitely a learning curve for me in terms of "directing" other people within roles rather than just figuring it out myself. It required an outward clarity of vision that took some getting used to, but by the end of the shoots, I felt a lot more comfortable working with a crew and conveying my vision in a productive way.

The shoots were especially rigorous for the primary two shooting locations. For the first, we planned to shoot it all in a night in a friend's apartment, which required completely clearing out their apartment, cleaning, and then reassembling our set in the same space. This shoot ended up running long, as they all do, and we couldn't finish in time, so we had to tear down our set, reassemble their apartment, then return two weeks later to do the same thing for our final shoot. In addition, my lead actor (and some of my crew) was training for the NCAA D3 Cross Country meet, so we had to work on tight schedules to make sure they were getting enough rest. The other primary shoot, to create the "cable," presented its own set of difficulties. I purchased 14 battery-powered LED lights to line the aqueduct representing the cable, which I planned to run on AA batteries. However, on getting there, we realized that the lights kept going out. In the short term, I was able to solve this by lowering the brightness of the lights, but they were low quality and needed a stronger power source, so we had to do a second day of shooting for the cable as well: this time, using eighteen-plus Sony camera batteries from IMS, Studio 47, and other sources.

Most of the feedback I received along the way was applied in the editing room. I put a lot of work into camera angles, pacing, and sound design, all of which I received suggestions on how to improve. Figuring out the pacing was particularly challenging, finding the right balance between keeping things moving and allowing scenes room to breathe, but the feedback I received and my own judgement helped me find footing between those two poles. It was also really fun to work with my composers, JT Bard and Oscar Roerring, to create and iterate on a score that captured the tone of the piece, working primarily with synths and electric guitar. I also received feedback to integrate Marx more into my thesis, which relates more to this paper, but was

nonetheless helpful in structuring both the edits I made to the script and the direction I gave to my actor.

Connecting the execution of my film to its theoretical background took place primarily through two avenues: the script and the production design. In particular, as I explore the themes of embodiment, alienation, and self-tracking, there were little sections of the script where it became clear I could address certain elements, such as the disembodied female voice on the phone, the integration of books along with Gary's food drops, the conversations Gary has during the montage, and more. Hand in hand with this went the production design, which was one of the most fun parts of the entire project. With a budget of almost nothing and a fairly limited range of spaces to work in, we were able to create a living space for Gary that looked both cold and stifling, vaguely futuristic yet unmistakably outdated. I wanted to incorporate elements that were referential to my film's speculative fiction roots, using pieces like the banker's lamp and old fan to create thematic parallels to films like *Blade Runner*, while also building an atmosphere similar to that of *Severance* and *Black Mirror*. For the cable set design as well, I wanted to create an environment emblematic of the tech industry I portrayed: futuristic, yet unmistakably dirty, flawed, and relying on outdated methods and manual labor.

At the end of the day, that's what my project is about: the experience of pushing your body to the limits, and what it means when the tech industry tries to take advantage of that struggle. Integrating scholarship as widespread as Marx and McLuhan, Fitbit and feminism, my film takes a wholistic approach to considering the ways in which we interact, as people, with the technology that surrounds us. It asks two questions. What's the absolute most the tech industry can demand from us? And how do we respond? From my film, I believe the answer is clear. Watching it, you can see Gary grapple with his own mortality, with his father's. You can watch

him realize his body is limited, keep pushing. You can feel the dark basement conditions creeping in, the constant hum of fluorescent lights and power surges that remind him of both his alienation and his task. You can hear the indifference in the voice of his boss, the way they see Gary as interchangeable, as a feature of their product just like any other. And even in the production process itself, we encountered the limits of the human body. We had to walk the fine line of capturing the essence of a man pushed to the brink of his body and mind, while simultaneously making sure his body and mind stayed healthy and rested enough that he could compete in the coming days. For our lead, we could wrap at 11pm and he could go sleep, but it gave me a deeper appreciation for Gary, for the tech workers who aren't acting, who get up every day in service of constant, unattainable growth. As always, there are things I would do differently the next time around: test my lights more rigorously, change some camera settings, build more time into shooting schedules, make the cable longer, tweak dialogue here and there. But through the process of creating "The Man in the Fiber Optic Cable," I became a better director, cinematographer, writer, editor, gaffer, sound engineer, actor, and problem-solver. I asked some big questions. And in the process of answering them, I created something that I feel is wholly original and conceptually powerful. A portrait of desperation, of the present and the future, of struggle and failure. Ultimately, of hope.

Works Cited

- Baumann-Pauly, Dorothee. "Why Cobalt Mining in the DRC Needs Urgent Attention." Council on Foreign Relations, 2020. <https://www.cfr.org/blog/why-cobalt-mining-drc-needs-urgent-attention>.
- Brooker, Charlie. *Black Mirror*. Netflix, 2016.
- D'Ignazio, Catherine & Klein, Lauren. *Data Feminism*. The MIT Press, 2020.
- Erickson, Dan. *Severance*. Apple TV+, 2021.
- Freedman, Carl. *Critical Theory and Science Fiction*. Wesleyan University Press, 2000.
- Marx, Karl. "Estranged Labor." *Economic and Philosophic Manuscripts of 1844*. International Publishers, 1964.
- Nafus, Dawn & Neff, Gina. *Self-Tracking*. The MIT Press, 2016.
- Nakamura, Lisa. "Indigenous Circuits" in *American Quarterly*. The Johns Hopkins University Press, 2014.
- Roberts, Sarah. *Behind the Screen: Content Moderation in the Shadow of Social Media*. Yale University Press, 2019.
- Rosner, Daniela. "Making Core Memory: Design Inquiry into Gendered Legacies of Engineering and Craftwork." YouTube, 2018.
- Suvin, Darko. *Metamorphoses of Science Fiction*. Yale University Press, 1979.
- Tardi, Carla. "What Is Moore's Law and Is It Still True?" Investopedia.com, 2022. <https://www.investopedia.com/terms/m/mooreslaw.asp>.
- Vonnegut Kurt. *Breakfast of Champions*. Dell Publishing Company, 1975.
- Vonnegut, Kurt. *Slaughterhouse Five*. Bantam Doubleday Dell Publishing Group, 1998.